## **GOLF CLUB**

#### **BACKGROUNG OF THE INVENTION**

## 1. Field of the Invention

The present invention relates to an apparatus of golf, and more particular to a golf club.

# 2. Description of the Related Art

The golf club can be separated to two kinds as usual, one is made by metal and another is made by fiber material. The characters of the metal golf club are strong rigidity and structures but the weight is too heavy and lack of flexibleness. Most of the golf clubs in the market now are made by fiber material. The fiber golf clubs are almost made by wrapping or rolling the complex material that is made by carbon fiber boron fiber glass fiber or laminated fabric as light and flexibleness are the advantages. However, the strength of the golf club structure is poor obversely and the Tip where locates between the head and the flexible point is easy to break particularly at the high speed hitting condition. This is a long-term problem at produce the golf club.

### **SUMMARY OF THE INVENTION**

The primary objective of the present invention is to provide a golf club that the tip has more structure strength.

According to the objective of the present invention, a golf club comprise a club body that is made by fiber material and a Butter portion at one end of the club body and a Tip portion at the other end. The character of present invention is the Tip of the club body that is covered by an amorphous metal film.

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## BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of the preferred embodiment of the present invention;

FIG. 2 is a regional section view along the line 2-2 of FIG. 1;

### DETAILED DESCRIPTION OF THE INVENTION

As shown from FIG. 1 and FIG. 2, a golf club of the preferred embodiment of the present invention comprises:

A club body 20 that is made by rolling the fiber material that is preimpregnated with resin. The preimpregnated fiber material 21 can be carbon fiber boron fiber glass fiber or laminated fabric and a Butter portion 22 at one end of the club body and a Tip portion 23 at the other end. The character of present invention is the Tip 23 of the club body 20 that is covered by an amorphous metal film 30. The soft amorphous metal film is made by plate-float molding and the measurement is between 10  $\mu$ m and 80  $\mu$ m. In this embodiment of present invention, the measurement of the amorphous metal film 30 is between 15  $\mu$ m and 25  $\mu$ m with many holes 31 on it. The size of the holes can decide by defacto condition. In this embodiment, the size of the hole is in the recognizable size. The resin of the preimpregnated fiber material 21 of the club body 20 will sink into these holes and stick together and make the amorphous metal film 30 and the club body 20 bonded better when the amorphous metal film 30 covered on the club body 20.

As shows in FIG. 2, there is a pellucid protect layer covers at the outside of the amorphous metal film. The pellucid protect layer that is made by glass fiber can protect the club body 20 and the amorphous metal film 30.

The amorphous metal film also can be placed at the inside of the club body or in the preimpregnated fiber material before rolling to form the Tip of the club body and this will make the same effect to increase the structure of the Tip. Meanwhile, the club will have the characters of the fiber material and metal by adding the metal film into the fiber material to improve the strength and not lose the advantage of fiber material also. The structure of present invention is particular to increase the strength of the torsion and rigidity of the Tip of the fiber club and to make the fiber club can bear a big angular bending at high speed hitting but not break. A long-term problem at produce the golf club will be solved.